

1      **CLAIMS**

2      1. A method comprising:

3            encoding a first frame of data;

4            generating a first timestamp associated with the first frame of data, wherein

5            the first timestamp includes complete timing information;

6            transmitting the first frame of data and the associated first timestamp to a  
7            destination;

8            encoding a second frame of data;

9            generating a second timestamp associated with the second frame of data,

10          wherein the second timestamp includes a portion of the complete timing  
11         information; and

12          transmitting the second frame of data and the associated second timestamp  
13         to the destination.

14

15      2. A method as recited in claim 1 further comprising:

16            encoding a third frame of data;

17            generating a third timestamp associated with the third frame of data,

18          wherein the third timestamp includes a portion of the complete timing  
19         information; and

20          transmitting the third frame of data and the associated third timestamp to  
21         the destination.

1       **3.**   A method as recited in claim 1 further comprising:

2              identifying timing information related to transmitting the first and second  
3              frames of data; and

4              transmitting the timing information to the destination.

5

6       **4.**   A method as recited in claim 1 wherein the first timestamp includes  
7              hour information, minute information, second information, and a frame number.

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9       **5.**   A method as recited in claim 1 wherein the first timestamp includes  
10             an offset value that is used to relate the time associated with a frame of data to true  
11             time.

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13       **6.**   A method as recited in claim 1 wherein the second timestamp  
14             includes a frame number.

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16       **7.**   A method as recited in claim 1 further comprising:  
17              encoding a plurality of frames of data; and  
18              generating additional timestamps associated with each of the plurality of  
19             frames of data, wherein the majority of the additional timestamps include a portion  
20             of the complete timing information.

1       **8.**     A method as recited in claim 1 further comprising:  
2              encoding a plurality of frames of data;  
3              generating a full timestamp associated with one of the plurality of frames of  
4              data, wherein the full timestamp includes the complete timing information; and  
5              generating a plurality of compressed timestamps associated with the frames  
6              of data that are not associated with the full timestamp, wherein the compressed  
7              timestamps include a portion of the complete timing information.

8  
9       **9.**     One or more computer-readable memories containing a computer  
10      program that is executable by a processor to perform the method recited in claim  
11      1.

12  
13      **10.**    A method comprising:  
14              identifying multimedia content to be encoded;  
15              encoding the identified multimedia content into a plurality of frames of  
16              data;  
17              generating a plurality of full timestamps associated with a portion of the  
18              frames of data, wherein each full timestamp contains complete time information;  
19              and  
20              generating a plurality of compressed timestamps associated with frames of  
21              data that are not associated with a full timestamp, wherein each compressed  
22              timestamp contains a portion of the complete time information.

1       **11.** A method as recited in claim 10 wherein the full timestamps are  
2 associated with every Xth frame of data.

3

4       **12.** A method as recited in claim 10 wherein the full timestamps are  
5 associated with frames of data spaced apart by a predetermined time period.

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7       **13.** A method as recited in claim 10 wherein the full timestamps include  
8 hour information, minute information, second information, and a frame number.

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10      **14.** A method as recited in claim 10 wherein the full timestamps include  
11 an offset value that is used to relate the time associated with a frame of data to true  
12 time.

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14      **15.** A method as recited in claim 10 wherein the compressed timestamps  
15 include a frame number.

16

17      **16.** A method as recited in claim 10 further comprising storing the  
18 frames of data and the associated timestamps.

19

20      **17.** A method as recited in claim 10 further comprising transmitting the  
21 frames of data and the associated timestamps to a plurality of destinations.

1       **18.** One or more computer-readable memories containing a computer  
2 program that is executable by a processor to perform the method recited in claim  
3 10.  
4

5       **19.** A method comprising:  
6           receiving a first frame of data;  
7           receiving a first timestamp associated with the first frame of data, wherein  
8 the first timestamp includes complete timing information for the first frame of  
9 data;  
10          receiving a second frame of data; and  
11          receiving a second timestamp associated with the second frame of data,  
12 wherein the second timestamp includes a portion of the timing information.

13  
14       **20.** A method as recited in claim 19 further comprising decoding the  
15 first frame of data and the second frame of data.  
16

17       **21.** A method as recited in claim 19 further comprising:  
18           receiving a third frame of data;  
19           receiving a third timestamp associated with the third frame of data, wherein  
20 the third timestamp includes a portion of the timing information; and  
21          decoding the third frame of data.  
22  
23  
24  
25

1           **22.** A method as recited in claim 19 further comprising receiving timing  
2 information related to the manner in which frames of data are transmitted from a  
3 data source.

4

5           **23.** A method as recited in claim 19 wherein the first timestamp is a full  
6 timestamp and the second timestamp is a compressed timestamp.

7

8           **24.** A method as recited in claim 19 wherein receiving the first  
9 timestamp includes updating all timing parameters with the information contained  
10 in the first timestamp.

11

12          **25.** A method as recited in claim 19 wherein receiving the second  
13 timestamp includes updating timing parameters with the information contained in  
14 the second timestamp.

15

16          **26.** One or more computer-readable memories containing a computer  
17 program that is executable by a processor to perform the method recited in claim  
18 19.

1       **27.** One or more computer-readable media having stored thereon a  
2 computer program that, when executed by one or more processors, causes the one  
3 or more processors to:

4              encode a first frame of data;

5              generate a first timestamp associated with the first frame of data, wherein  
6 the first timestamp includes complete time information;

7              encode a plurality of subsequent frames of data; and

8              generate a plurality of subsequent timestamps, wherein each of the  
9 subsequent timestamps includes a portion of the time information.

10  
11       **28.** One or more computer-readable media as recited in claim 27  
12 wherein the complete time information includes hour information, minute  
13 information, second information, and a frame number.

14  
15       **29.** One or more computer-readable media as recited in claim 27  
16 wherein each of the subsequent timestamps includes a frame number.

1       **30.** An apparatus comprising:

2           an encoded multimedia content source; and

3           a decoder coupled to receive encoded multimedia content from the encoded  
4           multimedia content source, wherein the video content includes a first frame of data  
5           having an associated first timestamp, such that the first timestamp includes  
6           complete timing information for the first frame of data, and wherein the encoded  
7           multimedia content includes a second frame of data having an associated second  
8           timestamp, such that the second timestamp includes a subset of the timing  
9           information included in the first timestamp.

10  
11       **31.** An apparatus as recited in claim 30 wherein the decoder is  
12           configured to decode the first frame of data and the second frame of data.